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INTRODUCTION

This publication is designed to provide an introduction to the rich, varied, and complex nature of the prehistoric cultures who once inhabited Indiana, to inform the reader about the science of archaeology, and relate how and why it is practiced in our state. We hope that this introduction will help further interest in our state's prehistoric heritage, and create a desire to inquire in greater depth into archaeology and Indiana prehistory.

The rich and varied histories and prehistories of people living in the area that was to become the state of Indiana are fascinating in their complexity, achievements, and contributions to Indiana's heritage and history, not to mention cultural and scientific studies of the past. We hope that a better understanding and appreciation of these cultures and their contributions (which are still with us today) will be gained through reading this booklet. It is also hoped that some of the readers will be stimulated enough to pursue further studies of these groups, or even to pursue careers in, and contribute to, the study of the past.

In telling the story of Indiana prehistory and archaeology, archaeologists use technical terms at times. Such words and terms are placed in bold in the text, and a glossary is provided for those unfamiliar with the terminology.

OVERVIEW OF INDIANA'S PREHISTORY

Below is a concise description of the rich **prehistory** of Indiana. The word prehistory is a technical term used by archaeologists to indicate information about cultures before written records were kept--in North America at first by Europeans and people of Old World descent--in that area. It does not imply by any means the cultures described did not have long, rich, and varied cultural and oral histories and traditions. All of the cultures certainly did. The term is simply a technical one, used frequently by archaeologists. In such a short format, this account is not totally comprehensive, but it is intended to provide a general, basic background for learning about the **archaeology** (a branch of **anthropology**) of prehistoric cultures within the state. As our view of history changes, and as new information is brought to light, the picture of our Hoosier heritage will become more complete. Only by understanding our past can we hope to understand ourselves and our rich heritage and to appreciate the contributions of the past to our present lives. An understanding of the past helps us to appreciate our archaeological and cultural resources and what they can tell us, leading us to acknowledge that the preservation of these irreplaceable resources for future generations is not only extremely important, but necessary.

PREHISTORY OF INDIANA

As currently known, the prehistory of Indiana ranges from ca. 10,000 B.C. to approximately A.D. 1650 when peoples of European descent began to keep historical accounts of the area. Prehistoric cultures in Indiana follow the same general cultural sequence, and display similar cultural traits, as those found in the Eastern Woodlands area of the United States. However, given Indiana's location among different Great Lakes-riverine cultural areas, and its geographic and environmental setting bordering the Southeast and the upper Great Lakes area, one would expect, and indeed does find, a number of cultures and historic contexts unique to the state. Some of the latter possess a combination of characteristics of cultures from nearby cultural areas and of similar time frames, while others are unique in the region and beyond.

Paleoindians (ca. 10,000-7500 B.C.)

Based upon current evidence, Paleoindians are thought to be the earliest Native Americans who populated the New World (including the area now known as Indiana) during the end of the last glaciation (Wisconsin) of the Ice Age. Thus, their adaptations were to cooler and changing climates with different vegetation than today. They were likely small bands of hunting and gathering individuals who brought with them a sophisticated tool kit technology for killing and dressing large game, such as caribou, and including some species which are now extinct.

Paleoindian projectile points are lanceolate and many are consistent or similar in form throughout the Americas, and often are ground at the base for hafting purposes. Their tools are well made, out of good quality **chert** raw materials, and for the most part, exhibit fine workmanship. Common projectile point types found in Indiana include Clovis, Hi-Lo, Agate Basin, Cumberland, Quad, Plainview, and, in late Paleoindian times, Dalton (Figure 1).

Figure 1. Paleoindian projectile points.

Paleoindian points are present in nearly every county in Indiana (see Tankersley, Smith, and Cochran 1990). Other tools include scrapers and long blades (Figure 22).

The Paleoindian occupations in Indiana were of low population density, and often **sites** are short-term, specialized

activity areas found near large streams and other major water sources. Often, only surface finds of a few scattered **lithics** are present. Paleoindian sites are also found near chert sources.

An example of a well-known Paleoindian site in Indiana is the Magnet or Alton site, a **multicomponent** occupation of some time and intensity on a terrace of the Ohio River, and near a **Wyandotte** chert source (Smith 1984:35-38).

Early Archaic (ca. 8000-6000 B.C.)

Early Archaic sites in Indiana are found in most environmental settings, in much larger numbers than in earlier times. This is due to population increase and because the Early Archaic time period was a time of environmental and climatic change and diversification, becoming more similar to the environmental situation we are familiar with today. Early Archaic peoples were using resources in most of the settings, and there was apparently an increase in population size. Still, Early Archaic peoples were nomadic hunter-gatherers, seasonally exploiting the resources in their environment.

Technologically, there is an increase in the types and variety of Early Archaic tools, and the appearance of new hafting techniques is related to the new resources being exploited and the use of a spear thrower or **atlatl**. Hafting techniques include notching and bifurcated bases of spear points and knives. Processing of wild faunal resources involved the use of grinding and pitted stones. Projectile point types associated with the Early Archaic include Thebes, St. Charles, Big Sandy Side-Notched, Kirk, MacCorkle, St. Albans, LeCroy, and Kanawha (Figure 2).

A notable Early Archaic site is the Swan's Landing site (12Hr304), a tool manufacturing and habitation site (Smith 1986) that has been damaged by looting and river flooding/erosion. Recent investigations at another archaeological site, 12Hr520, revealed a substantial Kirk component and lithic workshop (Stafford 1998). At least three Early Archaic ceremonial/mortuary sites are recorded in the state, and two of these sites had cremations and evidence of rituals involving the use of red ochre (Cochran 1997; Tomak 1991).

Figure 2. Early Archaic projectile points.

Middle Archaic (ca. 6000-3500 B.C.)

The Middle Archaic is not well-defined or understood in Indiana. This cultural period is associated with a climatic warming trend, and some tools appear which continue in manufacture and use into the Late Archaic. Side notched points are present, and diagnostic projectile points include Stanley Stemmed, Faulkner-Raddatz, Godar (Figure 3), Karnak, and Matanzas (Figure 4). The latter two point types, for example, continue into Late Archaic times.

Many ground stone tools were used and appear during this time period. Grooved axes and spear thrower weights occur. Middle Archaic settlements appear to have lasted longer, indicating increased sedentism, and occur along major drainages. More evidence of mortuary activities is apparent. Harvesting of resources such as nuts, and possible starchy seed use, are also characteristics.

An example of a Mid-Late Archaic site in Indiana is the Bluegrass site, with evidence of human and dog burials, trash pits,

and hearths (Anslinger 1988).

Figure 3. Middle Archaic projectile points.

Late Archaic (ca. 4000-1500 B.C.)

There is no clear transition from Middle to Late Archaic, and Late Archaic appears to be a changing continuation of Middle Archaic. Late Archaic peoples appear to show distinguishable cultural or ethnic differentiation or boundaries, from drainage to drainage. These groups show a detailed knowledge of the environment, and likely scheduled their activities according to seasonal changes and resources. Definite evidence of use of weedy plants such as goosefoot and lambsquarters is known. Late Archaic cultures or groups include French Lick, Bluegrass, Glacial Kame, Early **Red Ochre**, and Maple Creek.

Projectile point types for this time period include Matanzas, Brewerton, Karnak, McWhinney and other stemmed projectile points (Figures 4 and 5). Generally, these points are manufactured from local, and lower quality cherts, and there appears to be less concern for quality in craftmanship or workmanship of projectile point technology.

Figure 4. Mid-Late Archaic projectile points.

Figure 5. Late Archaic projectile points.

The number of tool types increases greatly in the Late Archaic, including many varieties of woodworking tools and tools for food processing. Tool types include manos, mortars, grinding slabs, nutting stones, bone and antler tools (e.g., fishooks, awls, pins), and ornaments such as beads made of shell, pearls, and copper, pendants, gorgets, and hairpins.

Many site types occur, including shell middens or "mounds," fishing sites, large semi-permanent villages, and cemeteries. Mounds and ritualistic treatment of burials are present in the latter stages of Late Archaic.

An example of a Late Archaic site in Indiana is the McCain site, which yielded information regarding subsistence, settlement, and burials. A shell midden was present at the site (Miller 1941). The McKinley site (e.g., Little 1970) is an example of a large Late Archaic village, now mostly destroyed, from which **avocational archaeologists** recovered substantial information.

Terminal Late Archaic (ca. 1500-700 B.C.)

This cultural period in Indiana is primarily represented by the Riverton culture, Terminal Archaic barbed projectile points, and transitional Late Archaic-Early Woodland sites (e.g., sites with Turkey-tail points). Characteristics of the Riverton culture include small projectile points and **microtools** often made of local cherts--including glacial and pebble cherts--termed Riverton and Merom points (Figure 6). The Riverton occupations may be described as riverine, as sites are found along major rivers and streams such as the Lower Wabash, Ohio, and the White River drainages.

Terminal Archaic barbed points (Figure 6) have rather long stems with tangs or barbs on the point. Turkey-tail points (Figure 7) and evidence of red ochre ritual and mortuary activities (with copper beads and implements) are also found in the Terminal Late Archaic.

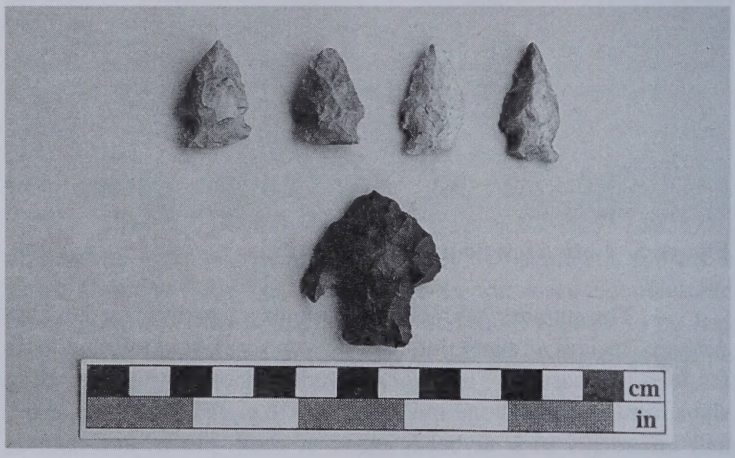


Figure 6. Terminal Late Archaic projectile points.

A well-known Riverton site with pit features, midden, large amounts of lithic materials, and house structures–revealed by linear patterns of post molds–is the Wint site, in southeastern Indiana (Anslinger 1986:63-157).

Figure 7. Late Archaic-Early Woodland Hebron Turkey-tail projectile point.

Early Woodland (ca. 1000- 200 B.C.)

For archaeologists, the somewhat arbitrary differentiation of Early Woodland from Late Archaic groups is based on the appearance of pottery or **ceramics**. Mounds continue to be constructed, with elaboration of ritual and mortuary activity. Mortuary complexes with log tombs and red ochre are found. There is evidence of selection of plants, including gourds and sunflowers, and horticulture. Large bladed projectile points (Figure 8) are diagnostic, including Adena, Kramer, Dickson, Motley, and Gary Contracting stemmed points.

Figure 8. Early Woodland projectile points.

Cultural groups or phases include Adena and Crab Orchard. Adena sites in Indiana include burial mounds with log tombs and grave goods. The Crab Orchard Phase, in southwestern Indiana, is characterized by **fabric-impressed ceramics** (see Ruby 1994).

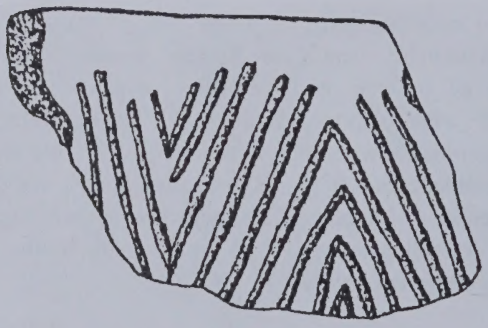


Figure 9. An Early-Middle Woodland New Castle Incised sherd (in Johnson 1995. Drawing by Kathy Wells).

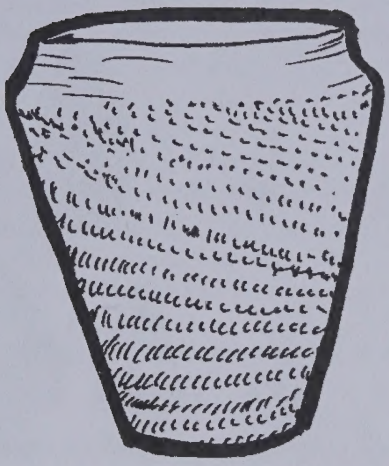


Figure 10. An Early Woodland pottery vessel (Mangold 1997).

Examples of Early Woodland sites include the Nowlin Mound (Black 1936; Kellar 1993; Figure 25) with log tombs, and the C.L. Lewis Stone Mound site with human burials and limestone slabs (Kellar 1960, 1993). Notable Early to Middle Woodland sites include the earthwork complexes at Mounds State Park and the New Castle site–the latter in eastern Indiana.

Middle Woodland (ca. 200 B.C.-A.D. 600)

Although there is no exact cut off point between Early and Middle Woodland, the latter demonstrates many new and complex characteristics which distinguish it as a distinct cultural period. The Hopewell manifestation of Middle Woodland has been described as a "florescence" of cultural activities, and certainly a complex of inter-regionally related cultural groups with mounds and earthworks complexes, ceremonial and mortuary sites, and hierarchical social organization, possibly tribes.

Diagnostic projectile points include Snyders, Chesser, Baker's Creek, Lowe, and Steuben (Figure 11). Some of these points extend into the early portion of Late Woodland as well. Ceramic sherds dating to this period include Havanna, Scioto, Late Crab Orchard, Mann, Allison-Lamotte, and others (Figure 12).

Figure 11. Middle Woodland projectile points.

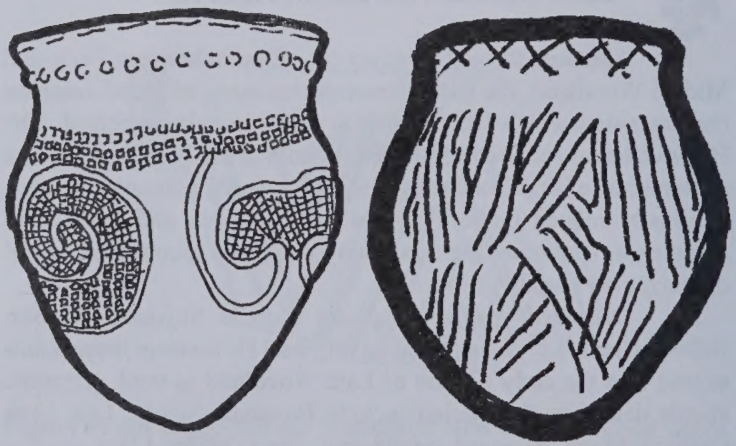


Figure 12. Middle Woodland pottery vessels (Mangold 1997).

Other diagnostic tools include blades and blade **cores**, clay figurines, copper celts, panpipes, and platform pipes. Interregional trade networks exchanged galena, copper, mica, shell, and obsidian raw materials and artifacts. In Indiana, some of these sites have astronomical alignments within and between mound complexes (e.g., Cochran 1992). Mound complexes, such as these, are examples of public and monumental architecture. Horticulture was practiced, and plants such as goosefoot, marshelder, and sunflower were harvested. Cultural and regional expressions of Middle Woodland in Indiana include Mann, the Goodall Focus, Crab Orchard, Allison-Lamotte, Havana, and Scioto.

The Mann site, in southwestern Indiana, is an example of an elaborate earthworks and village complex with mounds and embankments (Figure 13). The Mann site is a major, unique site with exotic artifacts, including southeastern **complicated stamped** sherds (e.g., Kellar 1979; Ruby 1993). Noteworthy artifacts from the site include blades and blade cores, copper, cut mica, obsidian, quartz crystals, and clay human figurines. This site is one of the largest and most important Middle Woodland sites in the Eastern United States. Another example of Middle Woodland sites in Indiana is the Goodall site (e.g., Quimby 1941; Schurr 1997a, 1997b) in northwestern Indiana. This site is a mound group of 22 mounds with strong evidence of interaction with the Illinois River Valley.

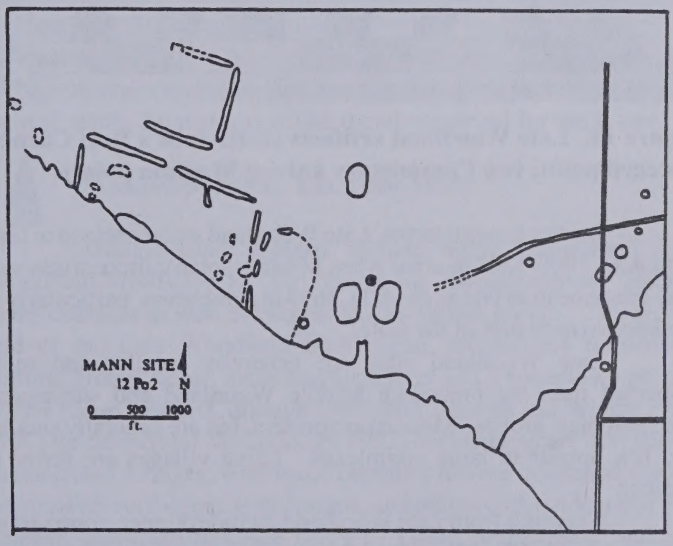


Figure 13. The Mann site (Ruby 1993).

Late Woodland (ca. A.D. 500-1200)

During the Late Woodland period, a number of new cultural characteristics arise. The bow and arrow appears, with the first arrowheads: small triangular chipped stone projectile points with names such as Madison. Notched points such as Racoon Side-Notched and Jack's Reef Corner-Notched points are also present (Figure 14). Commissary knives, large triangular knives for cutting purposes, are found. Other artifacts present include hoes for agricultural purposes. Full-scale, intensive agriculture first appears, with maize, beans, and squash being the major foodstuffs being cultivated.

Figure 14. Late Woodland artifacts (L-R: Jack's Reef Corner-Notched point; two Commissary knives; Madison point).

In very general terms, Late Woodland sites continue in time until A.D. 1000-1200 in areas when Mississippian culture arises, and may continue to as late as ca. A.D. 1650 in some areas, particularly in the northeastern part of the state.

Late Woodland sites are generally smaller and more dispersed than the preceding Middle Woodland and subsequent Mississippian groups. Mounds are present, but are generally smaller and few appear in large complexes. Large villages are fewer in number.

Ceramics from Late Woodland include thinner, cordmarked vessels, some with **collared** or thickened rims, such as Albee and

Newtown pottery containers, for example. Late Woodland cultural groups or phases include Yankeetown, Newtown, Allison-Lamotte, and Albee. As mentioned above, in northeastern Indiana, Late Woodland cultural occupations apparently continued until just before contact with historically recorded cultures.

The Albee Phase or complex is found in central and northern Indiana, and is recognized by the presence of collared or wedge-shaped thickened rims with decoration on the neck, peak of the wedge, or interior portion of the lip. Other Late Woodland manifestations in Indiana include Newtown in the southeastern portion of the state, and Allison-Lamotte, which extends from Middle-Late Woodland. The Yankeetown Phase (see Redmond 1986) is found in extreme southwestern Indiana and exhibits diagnostic incised ceramics, often **grog tempered**. Another occupation, termed the Oliver Phase, refers to a late prehistoric "emerging Mississippian" culture that inhabited the White River drainages in central and south-central Indiana (discussed below). Many Yankeetown and Oliver Phase sites have been preserved or investigated under federal laws, state law, and with Historic Preservation Fund grants.

An example of a Late Woodland site in Indiana is the Hesher site, an Albee cemetery with human and dog burials (Cochran 1988). The Van Nuys site is an occupation site related to the Hesher site and another site called the Commissary site (Burkett and Cochran 1984; Burkett and Hicks 1986; Cochran 1988). Another instance of a habitation site is the Morrell-Sheets site (McCord and Cochran 1994). A portion of this site was excavated as part of a highway project, while the rest was avoided and preserved for the future.

Mississippian (ca. A.D. 1000-1650)

Mississippian peoples include some transitional Late Woodland-Mississippian or emerging Mississippian cultural manifestations as well as various Mississippian groups. Toward the end of the Late Woodland time frame, unique and transitional cultural groups occur, including the Oliver and Yankeetown phases. Oliver Phase (see McCullough 1991; McCullough and Wright 1996, 1997; Redmond and McCullough 1993) occupations are best known as nucleated villages, with some ceramics having thickened rims or collars with cord-impressed designs, and others with evidence of Fort Ancient characteristics (see below). These "transitional" cultures display both Late Woodland and Mississippian traits.

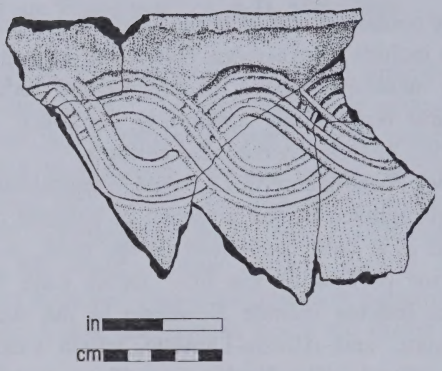


Figure 15. Oliver Phase sherd (McCullough 1991).

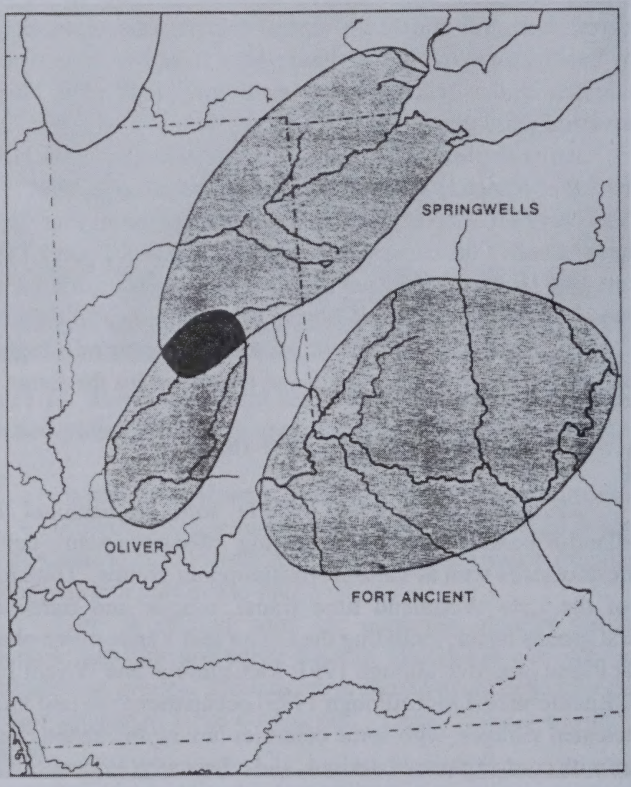


Figure 16. Distribution of Oliver Phase sites (McCullough 1991).

So-called "classic" Mississippian archaeological sites have characteristics such as platform (truncated) mounds, public and ceremonial architecture, plazas, nucleated villages/towns with nearby hamlets and farmsteads, palisaded settlements, cemeteries, intensive agriculture (maize, beans, and squash), and stratified or hierarchical (non-egalitarian) **chiefdom** levels of social organization. The best known site with such characteristics is the Angel site (see below) in southwestern Indiana.

Artifacts characteristic or diagnostic of Mississippian occupations in the state include **shell-tempered** pottery, pottery with lugs and handles, salt pans, hoes, ladles, effigies, and triangular projectile points (Figure 17) and Nodena and Cahokia point forms.

Figure 17. Triangular arrow points (L-R: Early Madison; Late Madison; Fort Ancient).

Mississippian cultural occupations in Indiana may be divided into Middle Mississippian and Upper Mississippian groups. Middle Mississippian groups include the Angel Phase (ca. A.D. 1050-1400), the Caborn-Welborn Phase (ca. A.D. 1400-1700), and Vincennes groups in southwestern Indiana. The Angel Phase consists of a fortified town and temple mound complex with connections to nearby villages and hamlets, and classic (see above) Middle Mississippian characteristics (see Black 1967). The best known Middle Mississippian site in Indiana is the Angel site, in Vanderburgh County (Black 1967). The site was a town with flat-topped mounds and a large plaza, and was tied to nearby hamlets and farming communities.

The Caborn-Welborn Phase is a later Mississippian expression with smaller, dispersed villages and hamlets (see Munson 1995; Figure 18). Caborn-Welborn yields some evidence of indirect contact with Euroamerican cultures and can be characterized as protohistoric. Researchers have not been able to connect this culture with historically recorded ones in Indiana.

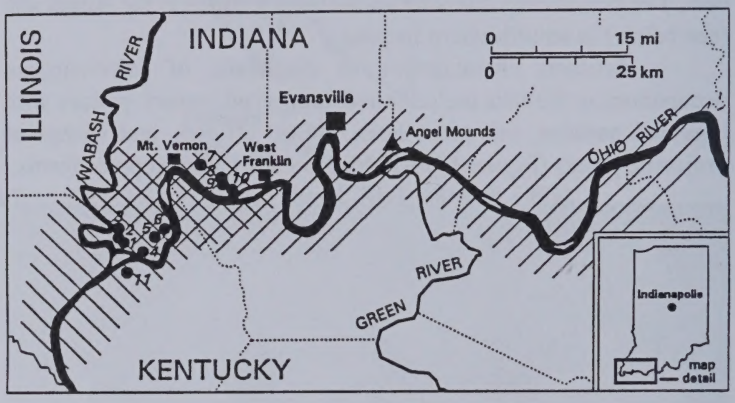


Figure 18. Distribution of Caborn-Welborn sites (Munson 1997).

Another Middle Mississippian manifestation, found in southwestern Indiana and in nearby Illinois, is the relatively unknown Vincennes Culture (Winters 1967).

Upper Mississippian groups in Indiana are generally found in the northern, central, and southeastern parts of the state and demonstrate less "classic" characteristics of Mississippian cultures. Upper Mississippian cultural groups in Indiana include Fisher and Huber in northwestern Indiana, and Fort Ancient in southeastern Indiana. Fisher and Huber groups exploited wetland and marsh edges in prairie environments, hunted bison, were hunter-gatherers and farmers, and lived in nucleated villages (Faulkner 1972).

In the southeastern portion of the state, Fort Ancient occupations occurred. The classic 1943 work by James B. Griffin on Fort Ancient describes Fort Ancient peoples as living in nucleated farming villages circular in shape, surrounded by wooden post stockade walls, along major drainages with large expanses of cultivable floodplain.

At least one Mississippian phase or complex which is poorly understood is the Prather complex, which lies between, and may exhibit characteristics or influences of, both Angel and Fort Ancient groups (Janzen n.d.).

ARCHAEOLOGY AND THE EVIDENCE OF ARCHAEOLOGY

Archaeology is the study of past, recent, and sometimes living cultures through the analysis of the material remains they left behind. These remains include artifacts and features and the **associations** of each to the others. Counts, frequencies, and maps of these through time and space indicate patterns reflecting the unique characteristics and configurations of past peoples or cultures.

From this, you can see that the locations of features and artifacts are all important. Without the precise location, **provenience,** or **context** of the particular artifact or feature, these patterns and cultural arrangements can never be determined by the archaeologist, and the story of the people leaving these behind can never be written. If you do not know what site an artifact came from, it becomes considerably less meaningful in terms of the information it can reveal about the past.

If you are a collector of artifacts, remember that archaeological artifacts are unique and irreplaceable, and the information they hold is invaluable. Thus, it is very important to record their locations and to properly record information about the artifact, its collection, and the site it came from. See *Tips for Responsible Artifact Collecting* in Appendix A.

As mentioned, there are two basic types of archaeological evidence which indicate the presence of an archaeological site: **artifacts** and **features.** Artifacts are evidence of human behavior, but may be more precisely distinguished from features as any portable object made and/or used by humans. Features are defined as non-portable evidence of past human behavior, activity, and technology. Artifacts and features may be either prehistoric or historic. Prehistoric artifacts and features are Native American in origin and date to a time before recorded history in Indiana, ca. 10,000 B.C. to perhaps as late as A.D. 1650-1700. Historic artifacts and features in Indiana generally date after the mid-17th century and refer to peoples of many ethnic and cultural backgrounds, including Native Americans, who lived in and populated the region which later became the state of Indiana.

Prehistoric artifacts include tools made of materials such as stone, bone, clay, shell, copper, and other--usually natural--raw materials. Some examples of prehistoric artifacts (some illustrated below) are spear points, arrowheads, knives, scrapers, ground stone axes, grinding stones, mortars and pestles, pottery, bone pins, awls,

hammerstones, and beads.

Figure 19. A full-grooved ground stone axe.

Figure 20. L-R: A bi-pitted stone and a pestle.

Figure 21. Chert scrapers.

Figure 22. Paleoindian-Early Archaic unifacial blades.

Figure 23. L-R: Thebes perforator; perforator; Early Archaic cutting tool.

Prehistoric features include fire pits and hearths, burned earth and clay, trash and garbage pits, post molds, evidence of house floors or basins, storage pits, clusters of artifacts (e.g., chipped and broken stones, ceramics or pottery sherds, caches of projectile points), human burials, animal burials, clusters of animal bone, earthworks (such as mounds and circular enclosures), **petroglyphs** and **pictographs,** and **middens.**

Figure 24. Features: excavated post molds at a Mississippian site.

An archaeological site is an instance of past human behavior or activity, where humans conducted some activity and left evidence of it behind. The presence or occurrence of one or more artifacts or features indicates an archaeological site. Features may be recognized by the presence of non-portable evidence of past human activities.

Prehistoric site types common in Indiana include campsites, villages, mounds, chert quarries, cemeteries, artifact caches, tool manufacturing areas, food processing and gathering areas, hunting and butchering sites, lithic scatters, and isolated artifact finds.

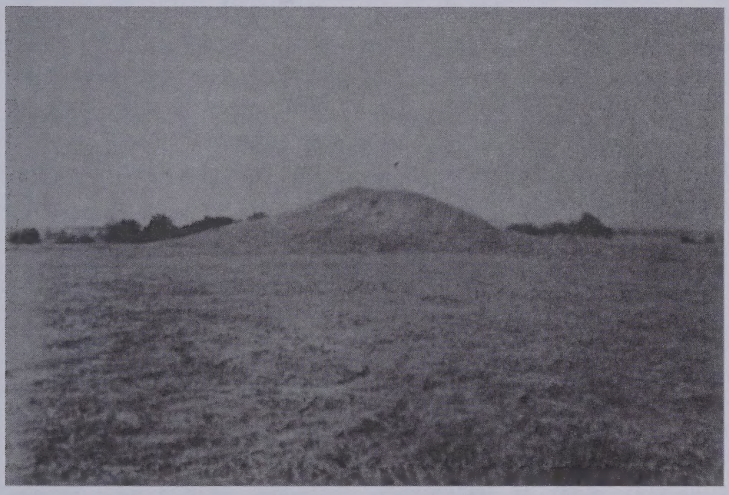


Figure 25. Example of an archaeological site. The Nowlin Mound (Black 1936:308). Courtesy of the Indiana Historical Bureau, Indianapolis.

Currently, there are approximately 47,500 prehistoric and historic archaeological sites which are documented in Indiana. Prehistoric sites in this database range from Paleoindian through Mississippian, and include similar site types as cited above, and large mound and earthwork groups, towns, hamlets, special use/activity areas, and nut and food processing sites. At present, there are 34 archaeological sites in the state that are listed in the National Register of Historic Places. These include sites such as the Early Archaic Swan's Landing site, the Early-Middle Woodland New Castle mounds complex, the Early-Middle Woodland Mounds State Park, the Middle Woodland Mann site, the Middle Woodland Mount Vernon (GE Mound) site, the Late Woodland transitional

Yankeetown site, the Middle Mississippian Angel Mounds site, and the Hovey Lake Archaeological District that includes Mississippian to protohistoric Caborn-Welborn sites.

Archaeological Methods and Techniques

Before an archaeologist begins to study past cultures and to investigate archaeological sites and the artifacts and cultural deposits they left behind, he or she will spend a lot of time researching what is already known about the particular group or culture of interest, and learn as much as possible about this past research and studies already conducted; what is already known about the site or sites to be investigated; what is known about the known and recorded sites in the vicinity or region; and as much about other factors, such as environment, climate, geology, past vegetation and fauna in the area, hydrology, soils, and other elements, influencing past cultures and their adaptations.

Before and during this process of research, the archaeologist will have developed research questions about the past which he or she wishes to investigate. General questions are sometimes asked, such as who were the people living in an area, what were they like, and what were their everyday lifeways like? Other times, more specific and scientific questions are posed, about human **culture** in general, or specific cultures, such as asking how did people from the past adapt to their changing surroundings, and how and why did aspects of their culture(s), such as technology, particular beliefs and values, economics, settlement patterns and subsistence, social groupings, and other important aspects of their lives and culture change or adjust through time?

An archaeologist will not investigate, survey, or excavate a site without very detailed research questions and a systematic plan for fieldwork and laboratory analysis of the information that will be recovered. The information, interpretation, and recording of the site, features, and artifacts are what is important. Sites, features, and artifacts are finite in number, and once disturbed, destroyed, or excavated, cannot ever be replaced. The patterns and relationships of these through time and space are most important, so that the archaeologist can view what artifacts, features, and sites are associated at certain times and in certain places. Since the ways people live and behave are patterned, the patterns of archaeological evidence reflect this and allow the archaeologist to reconstruct past lives and behavior. Thus, it is extremely important to record and

recover the information from its original location, provenience, and context. If the features and artifacts are removed, disturbed, or destroyed without detailed mapping and recording, then the patterns of the past cannot be determined.

There are two basic methods archaeologists use to discover, investigate, or to recover information from archaeological sites: **survey** (reconnaissance) or controlled **excavation**. The purposes of a survey are to locate sites and to recover preliminary information concerning their boundaries, samples of artifacts, possible occurrences of features or concentrations of artifacts, cultures that once occupied the site, possible dates of the site, and information about the environment such as soils, landforms, and water.

Survey is usually accomplished by walking an area at certain intervals, such as every five or ten meters, looking for evidence of a site. If there is adequate ground surface visibility, such as in a plowed field, artifacts will be seen when encountered. The artifacts are then collected, and the surface of the site is also examined for evidence of any features which may be apparent. Site boundaries are determined by mapping where the artifacts and/or features begin and end. Artifacts from the site are placed in bags labeled with the date surveyed, site number, names of crew members, and any other relevant information, so that the archaeologist always knows what site the artifacts came from.

Figure 26. Archaeological survey with surveyors lined up at five meter intervals.

If the surface of the ground is mostly or completely obscured and cannot be seen, the archaeologist may use shovel probes as a technique to look below the surface for artifacts and features. Shovel probes are small holes excavated to find evidence of a site. They are often excavated every 5, 10, or 15 meters on a grid over the entire site. Again, when artifacts or features cease to be discovered by the probes, the site boundaries have been reached. Shovel probes also allow the investigator to obtain evidence of soils and stratigraphy at the site. Occasionally, the archaeologist may take soil samples with coring or augering tools during a reconnaissance.

Archaeological excavations are conducted according to a systematic plan and with specific questions and research goals in mind. Excavations may take place after a survey. Before excavations take place, professional research is conducted into what is already known about the site. Research into past archaeological projects conducted in the vicinity and region of the site is completed as well. A knowledge of past cultures present in the area is also necessary.

Once a research design has been developed, a site has been chosen for excavation, and the site and surrounding region have been researched, a grid system of intersecting points and lines is set up with a surveying instrument, such as a transit, on the site. A coordinate system is developed for the grid so that it is always known where on the site the archaeologist is excavating. Square or rectangular units are laid out on the site in areas where the archaeologist wants to excavate. These units are designated by the coordinate system and

Figure 27. A grid and excavation units on an archaeological site.

large nails, pin flags, or stakes are placed in the corner of each of the units.

Excavation is a slow and careful process. Units are systematically dug in levels (either by arbitrary measurements or by stratigraphic or natural levels), and the archaeologist records the position of every artifact or feature, as well as the depth. When a unit is excavated, everything encountered is systematically recorded and recovered. This information provides the archaeologist with an understanding of the context in which these data are found. This also allows the archaeologist to understand the relationship of the site to other sites in the area.

Figure 28. Archaeologists recording information at a prehistoric archaeological site.

Before excavation of a unit begins, a wooden or metal screen with standardized size (usually 1/4 inch) metal hardware "cloth" or mesh is set up into which the soil excavated from the unit is placed. Archaeologists then shake the soil through the screen and recover the artifacts left behind. The archaeologist has plastic or paper bags into which he or she places the artifacts recovered. Each bag is labeled by site number and name, unit, level excavated, feature (if present), date, the name of the project, and the names or initials of the individuals excavating the unit. In this way, all artifacts recovered will be able to be referenced to location, exactly where they were found on a site in space (horizontally) and by depth (vertically or through time).

Figure 29. An archaeologist sifting soil to recover artifacts from an archaeological site.

Units are excavated carefully, generally with hand tools--specifically, shovels and trowels. The top of the unit is measured and mapped according to elevation (depth) below a reference point on or near the site, and in space on a map of the site. Excavation takes place in levels, often in 10 centimeter levels. Once a level is excavated, the soil screened, and artifacts recovered and placed in labeled bags recording their location, then the floor or base of the unit at that level is hand troweled so that the archaeologist can inspect the base of the level for features or concentration areas of artifacts. Features are often discerned as areas of differences in soil coloration. Sometimes artifacts, evidence of burning, evidence of past digging or disturbance of the soil, or other non-natural evidence are present. A feature may also consist of a concentration of artifacts.

When a feature is encountered, it is mapped, measured, and

photographed, no matter where in the level it is discovered. A feature is then numbered and excavated separately. The soil from the feature is excavated, screened, and artifacts recovered and bagged and labeled in separate bags. Sometimes, a flotation sample of soil is recovered from a level or feature, so that smaller artifacts or organic remains can be recovered using finer techniques in the archaeological laboratory.

Figure 30. A large-scale excavation at a prehistoric site in northern Indiana.

A unit is excavated, level after level, until no more features or artifacts are encountered. This is what archaeologists call "sterile soil," or natural soil without artifacts or cultural deposits.

In excavation, then, artifacts are recovered, the soil from the units is screened so that artifacts may be recovered in that way, soil samples are taken, detailed notes and measurements are recorded, photographs are taken, and illustrations and maps are made. Even profiles of the soils and **stratigraphy** of the site and the units are mapped and photographed.

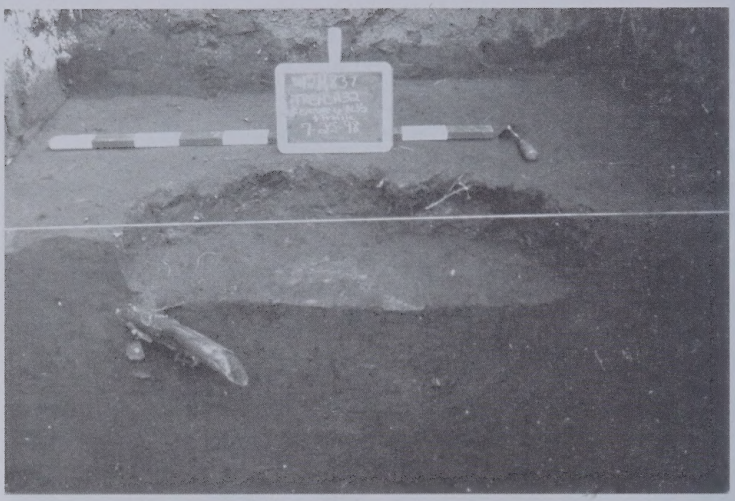


Figure 31. An excavated shallow pit feature at an Oliver Phase site in central Indiana.

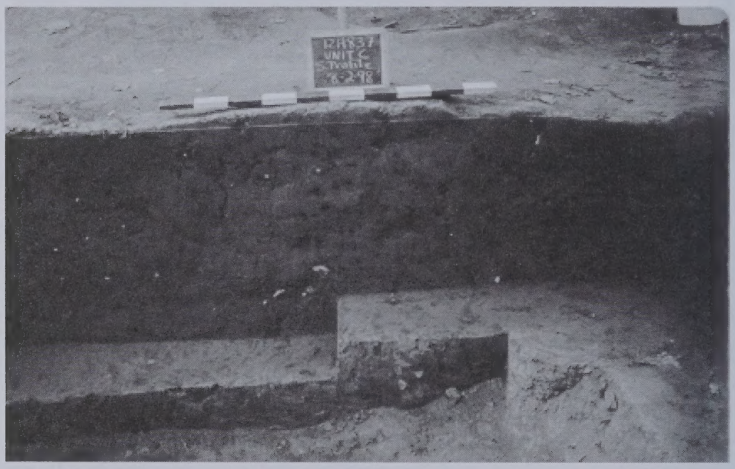


Figure 32. Photograph of a soil profile at a prehistoric site.

Once the excavation is complete, another, even more time-intensive, process takes place. All artifacts and records are taken to a laboratory for inventory, cataloging, and analyses. Laboratory work involves the careful cleaning of artifacts, the cataloging of every item that was discovered, and the analysis of the form, function, and type of every artifact. The dates or age of artifacts are also determined

when possible. Artifacts are also counted, photographed and/or illustrated, and often measured. Analyzing this information helps the archaeologist piece together the puzzle of what was happening at the site and why.

Maps of all units, features, and the overall site are prepared. Tabulations of artifacts from units, levels, and features are prepared, so frequencies of artifact types can be studied, and the artifacts compared to those of other sites. All of the fieldwork records, and copies of the report, are curated in a laboratory or museum, so that there is a permanent record of the work done at the site. In most cases, the artifacts are curated at these institutions as well, so that they may be viewed or studied at a future time.

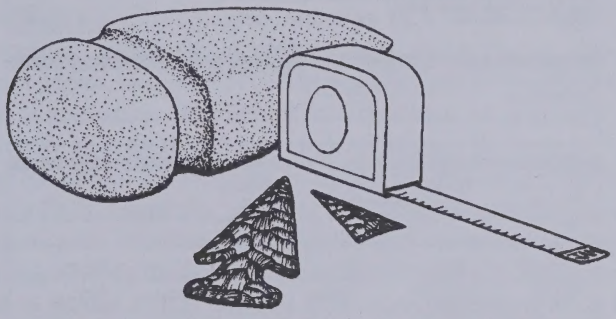
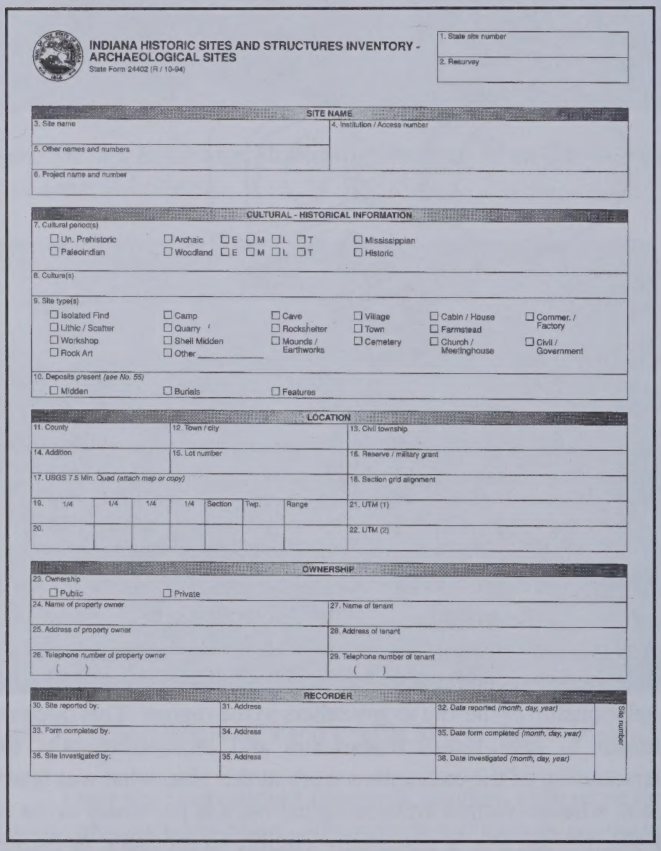


Figure 33. Measurements are an important part of archaeological analysis and recording (James A. Mohow).

After the analyses are completed, the professional report of the findings is written. This report summarizes the results of the excavation, explains the methods used, provides information on all of the artifacts and features which were uncovered, explains how the specific questions and research goals were addressed, and discusses the relationship of the site to any others in the region. This document is meant to give future researchers and archaeologists a clear understanding of the excavation work at this site, what was learned from it, whether further archaeological work is necessary at the site, and whether the site is potentially eligible to the State or National registers. The report should provide a permanent record of the site, the people who created it, and of the past. The archaeological report, records of the archaeological investigation, and the artifacts recovered are often all that remains after a site is investigated.

In addition to a professional report, the archaeologist must obtain an official site number and complete an archaeological site form for each site discovered, excavated, or reinvestigated. These forms provide a synopsis of what was found, the site location, and recommendations for the site. These forms are supplied as additional documentation to the office of the State Archaeologist. The information is then entered into a computerized database and site locations are recorded on a consolidated set of U.S.G.S. 7.5' topographic maps.



INDIANA HISTORIC SITES AND STRUCTURES INVENTORY - ARCHAEOLOGICAL SITES
State Form 24402 (R / 10-94)

1. State site number
2. Resurvey

SITE NAME

3. Site name
4. Institution / Access number
5. Other names and numbers
6. Project name and number

CULTURAL - HISTORICAL INFORMATION

7. Cultural period(s)
☐ Un. Prehistoric ☐ Archaic ☐ E ☐ M ☐ L ☐ T ☐ Mississippian
☐ Paleoindian ☐ Woodland ☐ E ☐ M ☐ L ☐ T ☐ Historic

8. Culture(s)

9. Site type(s)
☐ Isolated Find ☐ Camp ☐ Cave ☐ Village ☐ Cabin / House ☐ Commer. / Factory
☐ Lithic / Scatter ☐ Quarry ☐ Rockshelter ☐ Town ☐ Farmstead
☐ Workshop ☐ Shell Midden ☐ Mounds / Earthworks ☐ Cemetery ☐ Church / Meetinghouse ☐ Civil / Government
☐ Rock Art ☐ Other

10. Deposits present *(see No. 55)*
☐ Midden ☐ Burials ☐ Features

LOCATION

11. County
12. Town / city
13. Civil township
14. Addition
15. Lot number
16. Reserve / military grant
17. USGS 7.5 Min. Quad *(attach map or copy)*
18. Section grid alignment
19. 1/4 1/4 1/4 1/4 Section Twp. Range
21. UTM (1)
20.
22. UTM (2)

OWNERSHIP

23. Ownership
☐ Public ☐ Private
24. Name of property owner
27. Name of tenant
25. Address of property owner
28. Address of tenant
26. Telephone number of property owner ( )
29. Telephone number of tenant ( )

RECORDER

30. Site reported by:
31. Address
32. Date reported *(month, day, year)*
Site number
33. Form completed by:
34. Address
35. Date form completed *(month, day, year)*
36. Site investigated by:
37. Address
38. Date investigated *(month, day, year)*

Figure 34. Indiana archaeological site form.

Becoming an Archaeologist and Archaeology in Indiana

For the student who wishes to have a career in archaeology, it is never too soon to begin studying and taking appropriate courses. If a high school, junior high, or even elementary school student has access to classes involving, for example, history, geology, soil sciences, statistics, computers, Native American studies, or humanities in general, these would be excellent choices.

Although the training and educational requirements for students will vary with the type of archaeology they choose to go into, generally it is safe to state that a bachelor's degree will not be adequate to become a professional with a career in archaeology (Stuart and McManamon 1996). Most professional archaeologists go on to obtain a graduate degree (either an M.A. or M.S.) usually in anthropology, sociology, or archaeology. Generally, to obtain a Master's degree, two years of course work beyond the undergraduate degree is necessary, in addition to experience in fieldwork and completion of a thesis. Some students choose to continue their college educations by obtaining an additional graduate degree in the form of a Ph.D. Generally, pursuing a Ph.D. will take approximately three more years of college beyond the Master's level and will require the completion of a dissertation. At Indiana University, a person may choose to pursue a Ph.D. directly after receiving their B.A. or B.S. They must then complete some five years of classes, fieldwork, and a dissertation.

Currently, the universities in Indiana with anthropology/ archaeology programs include (*=graduate program): Ball State University*, Indiana State University, all Indiana University campuses (Bloomington*), Notre Dame University, all Purdue campuses (West Lafayette*), and the University of Indianapolis. Students in these programs learn the value of the science of archaeology, the endangered nature of archaeological sites, and the public benefits of archaeology. Many of these universities also have active cultural resource management programs that allow professionals and students to participate in federally or state-mandated archaeological investigations, as well as archaeological research and grant programs.

Educators from many of these institutions have been awarded Historic Preservation Fund grants from the Division of Historic Preservation and Archaeology to conduct scientific archaeological investigations in Indiana, have assisted the Division with the investigations of numerous "accidental discoveries" of

archaeological and human burial sites, and have actively supported and participated in Indiana's annual Archaeology Week.

In Indiana, professional archaeologists are usually found working in universities, state or federal government, museums, or private businesses. Archaeologists at universities may be professors, researchers, and/or **CRM** archaeologists. Professors predominately teach archaeology to college students, and conduct research into past cultures. These individuals may also be involved in projects where they are hired to conduct archaeological investigations on properties which are slated for development, construction, or extraction (e.g., mining) projects which disturb the ground and which fall under state or federal historic preservation laws. There may be researchers at universities whose duties do not involve teaching, but who conduct archaeological field and laboratory research as employees of a university, or under grants providing monies for research. Professors and researchers may also be affiliated with university museums.

Professional archaeologists working for federal or state agencies are responsible mainly for protecting significant archaeological sites and preserving information from them for the future. They do this under state and federal laws written to protect our national, state, and local heritage. In Indiana, these agencies include the Department of Natural Resources, Division of Historic Preservation and Archaeology; the USDA Forest Service; the Natural Resources Conservation Service; and the Indiana Department of Transportation.

Current prehistoric research being pursued by archaeologists in Indiana includes in-depth and long-term investigations of earthworks sites; the Early Archaic Kirk tradition; the Late Archaic in southwestern Indiana; Middle Woodland in southwestern and northwestern Indiana; Late Prehistoric sites along the forks of the White River; and the Mississippian/protohistoric Caborn-Welborn Phase. These projects have variously resulted in numerous field schools, grant and technical reports, papers presented at professional conferences, publications, public presentations, and some have or will result in theses and dissertations. Many of these projects have involved schools, training and public participation projects, work with county historical societies, and/or involvement with Native American groups. Papers relating to Middle Woodland and Late Prehistoric cultures which were presented during sessions at the 1998 Midwest Archaeological Conference will be published in special editions of the *Indiana Archaeology* journal.

In recent years, the Glenn A. Black Laboratory of

Archaeology at Indiana University has been focusing research on Late Prehistoric cultures of central Indiana which entails studying the prehistoric farming communities that once inhabited the White River drainage. This research has been able to document hundreds of Late Prehistoric settlements across central Indiana, and limited **test excavations** have yielded important information concerning the village life of Indiana's first farmers (McCullough and Wright 1996, 1997; Redmond and McCullough 1993).

The Archaeological Resources Management Service at Ball State University has been focusing on documentation and evaluation of Woodland mounds and earthworks in east-central and southeastern Indiana. Through extensive historical background research combined with surface survey, and test excavations, personnel from Ball State University have been able to document the location and present condition of many of these significant sites (e.g., McCord and Cochran 1996).

A similar study is being conducted in northeastern Indiana for mound groups associated with what is referred to as Goodall (Middle Woodland) by the University of Notre Dame (Schurr 1997a, 1997b). These studies are providing essential baseline data for the management and protection of these rare cultural resources.

In recent years, Purdue University has conducted numerous archaeological and cultural resources management surveys and excavation projects throughout much of the state. One recent area of prehistoric research has been a focus on Middle and Late Woodland occupations. Archaeological field schools conducted at the New Bedford Site in White County have documented a number of prehistoric components, as well as the remains of the 19th century town of New Bedford. Much of the prehistoric evidence from New Bedford appears to relate to Middle Woodland habitation between 200 B.C. and A.D. 600 (Helmkamp 1997).

Indiana State University has also been involved in numerous archaeological and cultural resource management studies throughout Indiana. The anthropology laboratory has conducted studies of many regional cultures, including, for example, a long-term study of Late Archaic occupations in southwestern Indiana, and many geoarchaeological studies (e.g., Stafford 1994). The university is also coordinating extensive and complex archaeological investigations in Harrison County. These investigations are yielding notable information from a wide range of archaeological sites, some of which date as early as 7,000 B.C. (the Kirk Tradition), and one site with evidence of a Middle Woodland structure (Stafford and Cantin

1996).

Research conducted for many years by Cheryl Ann Munson of Indiana University has contributed greatly to our understanding of the Mississippian Caborn-Welborn culture which flourished around the mouth of the Wabash during approximately A.D. 1400-1700. A recent survey project discovered 50 new sites and resurveyed 26 previously known sites. Forty-six sites were Mississippian. The project outlined a dispersed settlement pattern of small villages, farmsteads, and activity areas, in contrast to the earlier Angel Phase nucleated pattern (Munson 1995). These projects have all resulted in a better understanding of the village sites with respect to dating and the range of activities that occurred at each site which has been investigated (Munson 1995, 1997).

Becoming Involved in Archaeology and Ways to Help

Indiana's archaeological resources are non-renewable. As a result, we have to try and learn as much as we can about the evidence left behind by earlier peoples. It has been stated that "if the present rate of archaeological destruction continues, there may be no more sites to preserve in much of the world in 50 to 100 years" (Stuart and McManamon 1996:29). Citizens interested in preserving information about Indiana's rapidly disappearing archaeological resources can help in a variety of ways.

One of the best, and most effective, ways for persons to become involved is to familiarize themselves with the people (and resources) in the archaeological community who can help. To start with, learn about the staff at the State Archaeologist's office. They are there to serve the public, and one of their main duties is to help the public understand more about their archaeological heritage. The State Archaeologist's staff can provide you with information about recording sites, identifying artifacts, the laws which protect archaeological and human burial sites, and many other topics.

Become involved with one of the many avocational archaeological groups which are active in Indiana. These groups advocate the wise collecting of artifacts, the proper recording of sites, and the study of prehistoric and historic archaeology in the state. In the past, members of these groups have participated in grant-funded archaeological projects, have assisted the Division with investigations of accidental discoveries of archaeological resources, and have obtained state permits to conduct proper archaeological investigations. Many avocational archaeologists have also participated in

Archaeology Week by attending stewardship classes which promote the proper preservation of the state's archaeological resources.

Volunteering to work on a "dig" or professional excavation is another great way to become involved and gain valuable experience in various archaeological field techniques. Contact the universities and ask if volunteer opportunities would be available with their next summer field school.

Learning more about the laws which protect archaeological and human burial sites in our state will also help. Spread the word, and let other interested people learn more about how resources are protected in Indiana. You can take an active role by "keeping an eye out" for any illegal looting or digging activities. If you see, or know of any illegal digging, contact your local law enforcement officials, or our office, immediately.

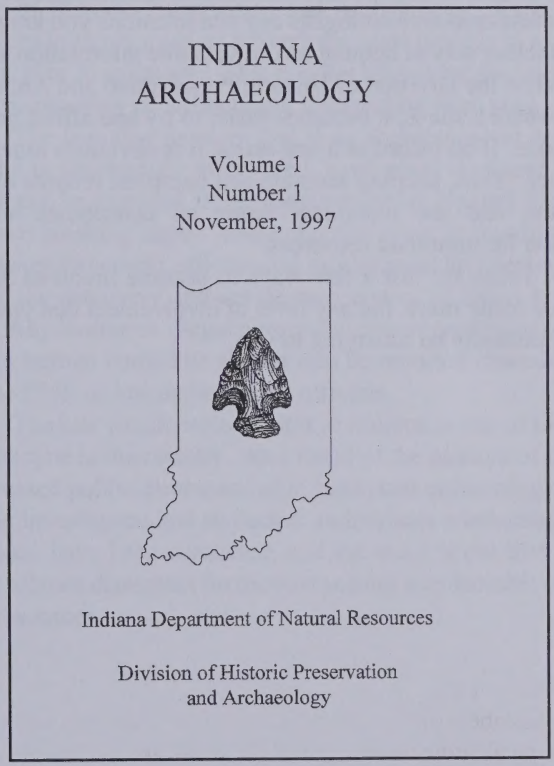


Figure 35. ***Indiana Archaeology*** **journal.**

Indiana Archaeology Week is also an excellent way to participate. Each year, numerous activities are available all over the state which allow people to: go on archaeological laboratory tours, visit excavations, have artifacts identified, record site locations, and many more opportunities. *Archaeology Week* allows the citizens of Indiana to learn more about their archaeological heritage, as well as learn more about the science of archaeology itself.

Learn more about archaeology through books, videos, lectures, and now even the world wide web. There are many sources of information on the latest trends and topics in archaeology and anthropology. Keeping up-to-date is important for both the professional and nonprofessional. For example, contact the National Park Service, national archaeological organizations, or the State Archaeologist for information on ways to keep current.

If you surface collect for artifacts and would like to share with professional archaeologists any site locations you know about, that is another way of helping record valuable information about the past. When the Division of Historic Preservation and Archaeology knows where a site is, it becomes easier to try and afford protection for the site. If no record of a site exists, it is obviously much harder to protect. Thus, keeping accurate and complete records of sites is important, and the individual doing so contributes additional protection for important resources.

These are just a few ways to become involved and help. There are many more, but any level of involvement that you choose will undoubtedly be satisfying to you.

THE HISTORIC PRESERVATION AND ARCHAEOLOGY LAW

Indiana has a law which protects archaeological sites. The Indiana Historic Preservation and Archaeology Law (IC 14-21-1) protects archaeological sites and historic burial sites regardless of their location on state or private lands. All archaeological sites dating before December 11, 1816 are protected under this act, as are buried human remains dating before 1940.

If someone wishes to surface collect artifacts, they may do so as long as they have permission to be on the property. Artifacts belong to the landowner, so a surface collector must also have permission from the landowner to collect and keep the artifacts.

To dig for artifacts, even on your own land, an approved plan for the excavation must be applied for and obtained from the Division of Historic Preservation and Archaeology. Even professional archaeologists must go through the same process to receive an approved plan to excavate. This process allows for the controlled, systematic recovery of artifacts and information from sites.

The law also requires that if an archaeological or human burial site is accidentally discovered, work must stop, and the discovery must be reported to the Department of Natural Resources within two working days. When the discovery is reported to the DNR, law enforcement officers and professional archaeologists investigate the discovery and decide on a course of action to protect the site. Any looting or illegal purposeful disturbance to an archaeological or human burial site should also be reported immediately to either the DNR or law enforcement officials.

The law which protects sites in Indiana is one of the strongest of its type in the country. As a result of the passage of this law, and increased public awareness of it, important archaeological sites are being investigated and protected. Individuals conducting illegal excavations have been convicted, and the word is out that Indiana does not tolerate disrespect for the past and our irreplaceable archaeological resources.

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GLOSSARY OF ARCHAEOLOGICAL TERMS

Anthropology The study of humankind, with particular emphasis on its cultural and biological adaptations.

Archaeology The anthropological study of past lifeways, cultures, and cultural processes through the investigation of material remains left behind by humans.

Artifact Any portable object made, used, and/or modified by humans. Or, more generally, any evidence of human behavior. Common **prehistoric artifacts** found archaeologically include spear points, arrowheads, knives, chipped or broken stone debris, ground stone axes, grinding stones, mortars and pestles, awls, adzes, gouges, pottery, clothing and ornamental pins, decorative items and ornaments, scraping tools, hammerstones, bone fishhooks, stone perforators, and beads.

Associations The relationships of artifacts and features at a site, based on provenience and context.

Atlatl A spearthrower.

Avocational archaeologist A person who participates in archaeology but does not practice it as a profession. Avocational archaeologists may volunteer to work with qualified professional archaeologists, and many take courses and gain substantial experience in archaeological methods and techniques. Others may be involved in archaeology as a hobby. Generally, avocational archaeologists subscribe to a preservation ethic to protect archaeological resources and to responsibly and legally preserve and study information from sites.

Celt An ungrooved axe. Celts may be made of pecked and ground stone, or hammered copper.

Ceramics Pottery vessels or potsherds.

Chert Stone of microscopic or small quartz particles used for the making of stone tools. Some types of chert include flint, agate, and jasper.

Chiefdom A non-egalitarian hierarchical social organization with a fixed and permanent role for a chief/leader.

Collared A thickened area present below the rim and above the neck on a clay pottery vessel.

Complicated stamped Decorations of curvilinear or rectilinear design on a paddle stamped into a clay vessel.

Context The position of an artifact or feature in its soil matrix, horizontal, and vertical location, and its relationship with other artifacts and features, related to the behavioral activities which placed it there.

Cord-impressed Impression into a clay vessel surface before firing by a stick wrapped with cord, or cord on the edge of a paddle.

Core A stone which exhibits one or more flake scars, showing that it has been used as a raw material for flintknapping.

CRM Cultural resource management. The protection, preservation, and recovery of information from archaeological sites, under federal and state laws. Universities and private archaeological companies often are hired to conduct CRM archaeology mandated under federal or state laws.

Culture A system of shared, learned, symbolic human behavior for adaptation to our natural and social environment. Culture may be thought of as a system composed of interrelated parts or subsystems, where a change in one part affects or influences the other parts. Subsystems interrelated with culture include technology, communication (and language), demography, psychology, economics, sociocultural organization, beliefs and values, subsistence, settlement, environment, etc.

Excavation The systematic recovery of archaeological deposits through the removal and screening of soil. These can be either **test excavations** or **mitigation**.

Fabric-impressed Impressions of woven fabric in the surface of a pottery vessel.

Feature Non-portable evidence of past human behavior, activity, and technology found on or in the ground. Prehistoric features commonly include fire pits and hearths, burned earth and clay, trash and garbage pits, post molds, evidence of house floors or basins, storage pits, clusters of artifacts (e.g., chipped and broken stones, caches of projectile points, ceramics or pottery sherds), human and animal burials, clusters of animal bone, earthworks (such as mounds and circular enclosures), petroglyphs and pictographs, and middens.

Gorget Decorative object worn on the chest.

Grog-tempered Ceramics tempered with fragments of crushed pottery.

Lithics Stones used or modified for human activities such as the manufacture of prehistoric tools, cooking, hunting, etc.

Mandible The lower jawbone of a human or animal.

Microtools Small tools predominately of stone manufactured and used to perform certain tasks.

Midden Cultural refuse or deposition built up at a site.

Mitigation The large-scale recovery, by excavation, of enough archaeological information from a site so that the entire range of materials present and information on past activities and behavior there may be retrieved. Termed Phase III in CRM investigations.

Multi-component An archaeological site with occupations from more than one culture or time period.

Petroglyphs Naturalistic or symbolic representations or depictions carved into stone.

Pictographs Pictures or drawings painted on rocks, cave walls, stone outcrops, or rockshelters.

Prehistory Human activities, events, and occupations before written records. In North America, this primarily includes Native American prehistoric cultures, but does not imply that these cultures did not have long, rich, and varied cultural and oral histories and traditions.

Provenience The horizontal and vertical location of an artifact at a site.

Red Ochre Late Archaic-Early Woodland culture with burial practices, usually in mounds, involving the use or placement of red ochre (a red hematite pigment).

Shell-tempered Ceramics (pottery) tempered with fragments of crushed shell.

Site The presence or occurrence of one or more artifacts or features indicates an **archaeological site**. An archaeological site is an instance of past human behavior or activity, where humans conducted some activity and left evidence of it behind, on or in the ground. Some common prehistoric site types include artifact caches, villages and camps, cemeteries, burials, workshops (e.g., stone debris from flintknapping activities), quarries, and earthworks (mounds, embankments, enclosures, fortifications, etc.).

Stratigraphy Horizons, strata, or layers of soil deposited at a location, where the deepest strata were deposited the earliest, and the more recent layers deposited higher in the stratigraphic sequence.

Survey The systematic recovery and recording of archaeological information such as site locations and artifacts by visually inspecting the surface of the ground. Termed Phase I in CRM investigations.

Test excavations Systematic excavation of a representative portion or percentage of a site to evaluate and determine its nature and extent, what information is present, whether there are intact or in situ deposits present, and the degree of disturbance to the site, often to determine whether it is eligible for the National Register of Historic Places. Termed Phase II in CRM.

Wyandotte A type of dark blue-gray chert found in southern Indiana.

APPENDIX A

Projectile Point Types (poster)
James A. Mohow (1997)

KEY TO PROJECTILE POINT TYPES

1. Clovis Point - 10,500 BC to 8,500 BC
2. Quad Point - 8,500 BC to 7,900 BC
3. Hi-Lo Point - 8,500 BC to 7,900 BC
4. Agate Basin - 8,500 BC to 7,500 BC
5. Dalton Point - 8,500 BC to 7,500 BC
6. Decatur Point - 8,000 BC to 7,000 BC
7. Lost Lake - 8,000 BC to 6,000 BC
8. Palmer Point - 8,000 BC to 7,000 BC
9. Kirk Corner Notch - 7,500 BC to 6,900 BC
10. St. Charles Point - 8,000 BC to 6,000 BC
11. Thebes Point - 8,000 BC to 6,000 BC
12. MacCorkle Point - 7,000 BC to 6,500 BC
13. Wabash Diagonal Notch - 7,000 BC to 6,000 BC
14. Big Sandy Point - 8,000 BC to 6,000 BC
15. St. Albans Point - 6,900 BC to 6,400 BC
16. Kirk Stemmed Point - 6,500 BC to 5,500 BC
17. LeCroy Point - 6,500 BC to 5,800 BC
18. Kanawha Point - 6,200 BC to 5,800 BC
19. Stanly Stemmed - 6,000 BC to 5,000 BC
20. Morrow Mountain - 5,000 BC to 4,000 BC
21. Raddatz Point - 6,000 BC to 3,000 BC
22. Elk River Stemmed - 3,500 BC to 2,000 BC
23. Brewerton Eared - Notched - 3,000 BC to 1,700 BC
24. Matanzas Point - 3,700 BC to 2,000 BC
25. Karnak Unstemmed Point - 4,000 BC to 2,000 BC
26. Karnak Stemmed Point - 4,000 BC to 2,000 BC
27. McWhinney Point - 4,000 BC to 2,000 BC
28. Lamoka Point - 3,500 BC to 2,000 BC
29. Ledbetter Point - 2,500 BC to 1,000 BC
30. Brewerton Corner Notch - 3,000 BC to 1,500 BC
31. Table Rock Stemmed - 3,000 BC to 1,000 BC
32. Riverton Point - 1,600 BC to 800 BC
33. Motley Point - 1,300 BC to 600 BC
34. Genesee Point - 3,000 BC to 1,700 BC
35. Buck Creek Barbed - 1,500 BC to 600 BC
36. Meadowood Point - 1,300 BC to 500 BC
37. Turkey-Tail Point - 1,500 BC to 500 BC
38. Adena Point - 1,000 BC to 100 BC
39. Kramer Point - 1,000 BC to 500 BC
40. Robbins Point - 500 BC to 1 BC
41. Snyders Point - 200 BC to AD 300
42. Copena Point - AD 200 to AD 700
43. Lowe Point - AD 200 to AD 700
44. Steuben Point - AD 100 to AD 700
45. Levanna Point - AD 500 to AD 1,200
46. Jacks Reef Corner Notch - AD 500 to AD 1,200
47. Madison Point - AD 500 to Historic Contact
48. Cahokia Point - AD 800 to AD 1,200
49. Fort Ancient Point - AD 1,000 to AD 1,500

Tips for Responsible Artifact Collecting:

Archaeological artifacts are unique and irreplaceable pieces of the prehistoric puzzle. Because of this, it is very important that artifacts be properly collected and recorded. The real value of artifacts lies in the information they provide on where, how, and when people lived in the past. Responsible artifact collecting recovers **information**, not just artifacts. To accomplish this, the IDNR Division of Historic Preservation and Archaeology recommends the following:

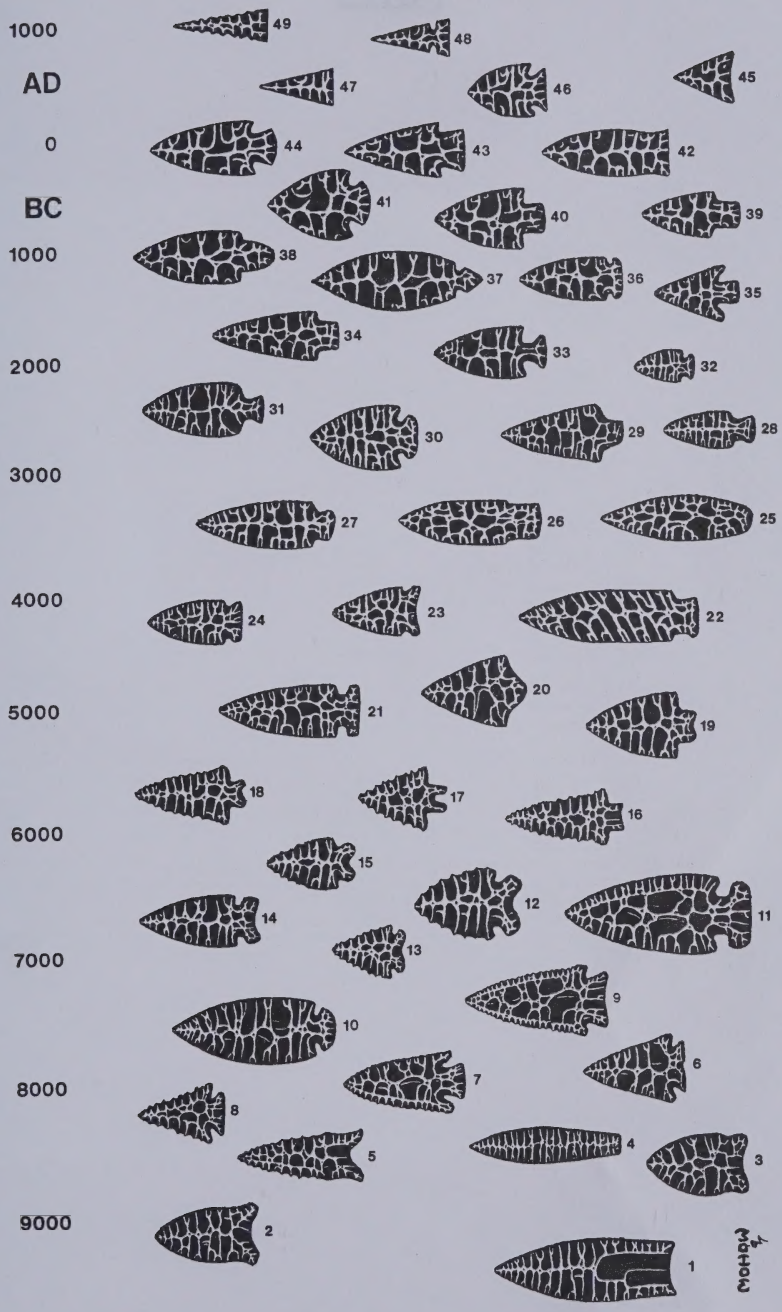
1) Always have the landowner's permission to be on their property and to collect artifacts.

2) When you find artifacts, record the location of the archaeological site on a map. Standard USGS 7.5 minute topographic quadrangle maps work well for this purpose, and may be obtained from the United States Geological Survey, the IDNR Map Sales office, and other map dealers.

3) Keep records on the location of artifacts. A good way to do this is to assign each archaeological site a specific letter or number, and to mark the appropriate number on each artifact collected. For lithic artifacts, for example, wash the artifact, and mark each piece using a fine-tipped pen and permanent ink. Write clearly and keep the markings small, so as to obscure as little of the artifact as possible. After the ink has dried, cover the markings with clear fingernail polish. This will keep the markings from rubbing off if the artifact is handled.

4) **Don't DIG for artifacts. Only collect artifacts from the surface.** The excavation of artifacts should only be done by professionals or avocationals who have been trained in proper, systematic excavation techniques. Improper digging for artifacts destroys irreplaceable information about the past. In Indiana, IC 14-21-1 requires that **any** excavation for prehistoric artifacts must be done in accordance with a plan that has been reviewed and accepted by the Division of Historic Preservation and Archaeology. Any discovery of human remains, or possible human remains, dating before 1940, should be left undisturbed and should be reported to the Division of Historic Preservation and Archaeology, or to an IDNR Conservation Officer, immediately.

5) **To learn more about archaeological resources and artifacts, you can contact the IDNR Division of Historic Preservation and Archaeology at 402 W. Washington Street, Room W274, Indianapolis, Indiana 46204, (317) 232-1646.**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